

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11)Publication number: **04155767 A**(43)Date of publication of application: **28.05.92**(51)Int. Cl. **H01M 4/62**
H01M 4/14(21)Application number: **02279405**(22)Date of filing: **19.10.90**(71)Applicant: **NIPPON TELEGR & TELEPH CORP**
<NTT>(72)Inventor: **HASUDA YOSHIAKI**
HORIE TOSHIO
ISHIZAWA MAKI**(54)THIN TYPE LEAD ACID BATTERY****(57)Abstract:**

PURPOSE: To prevent an active material from falling off by constituting in such a way that the active material has a crystalline graphite structure and also contains hollow carbon fiber as an additive.

CONSTITUTION: Cut fiber, sulfuric acid and water are added to lead powder so as to be kneaded together, and carbon fiber, which has the diameter of 0.1-0.3 μ m, the length of less than 7 μ m and a graphite structure of the hollow diameter of 0.03-0.14 μ m, is added to obtained paste to be agitated so that it can be 0.4wt.% to the lead powder, and then water content is adjusted

to be 13wt.% so as to form positive electrode paste. Meanwhile, two current collecting bodies consisting respectively of Pb-Ca-Sn alloy are arranged in parallel

pressure so as to form the current collecting bodies for a positive electrode and negative electrode. In this way, by forming the positive electrode paste by adding the carbon fiber having a crystalline graphite structure and a hollow structure to lead paste to be mixed, even if the graphite structure of the carbon fiber forms a compound between graphite layers, an active material never falls off because of the hollow structure.

COPYRIGHT: (C)1992,JPO&Japio